Physical exercise in higher education: Knowledge, attitudes and practices

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ABSTRACT

Sedentary behaviours have been associated with the emergence of chronic diseases, such as diabetes or hypertension. Conversely, regular physical activity has a leading role in promoting a healthy lifestyle, as evidenced by the numerous physical, psychological and social benefits. This study includes a systematic review of studies on knowledge, attitudes and physical activity of college students, which included declared criteria of eligibility. In general, in order to measure physical exercise, students should be essentially asked about the frequency (in number of days per week) of moderate, vigorous and light exercise, and the number of hours spent sitting. Scales of attitudes should address items that include lack of energy; lack of motivation; lack of resources; lack of support and lack of time. The scales of knowledge about physical exercise should include items about the recommendations about the practice of physical exercise and the relation between physical exercise and diseases. The current review, 1) provides guidelines for the construction of standardized measurement scales related to knowledge, attitudes and practice of physical exercise. And, 2) the main results presented can help in the elaboration of programs of education and promotion of the physical exercise in the university. **Keywords**: Physical exercise; Higher education; Physical activity; Knowledge; Attitudes.

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INTRODUCTION

Regular physical exercise contributes to a healthy lifestyle, however, Portuguese university students have a high prevalence of inactivity (41%) (Haase, Steptoe, Sallis, & Wardle, 2004). The WHO argues that the increase in knowledge about the international guidelines on the exercise represents a positive motivation prerequisite for a physically active lifestyle (WHO, 2012). This systematic review study aims to identify, retrieve and analyse the measuring instruments of knowledge, attitudes and exercise practices of higher education students.

MATERIAL AND METHODS

To ensure transparency and integrity of literature proceeded in accordance with the guidelines of PRISMA (Moher, Liberati, Tetzlaff, & Altman, 2010). From the research in five databases (PubMed, ERIC, CINAHL®, SciELO and ScienceDirect) of articles published in scientific journals, between 1980 and 2018, four terms are combined using Boolean operators. After carrying out literature searches, 16 articles were selected from a total of 169 studies found. It excluded a) studies on populations not only of higher education or samples of populations in specific situations; b) articles related to physical exercise and health problems and including the association with other risk behaviours; c) literature review articles or interventions; and, d) which did not present the psychometric measures of the instruments.

RESULTS

Analysis of assessment instruments of physical activity concluded that the Godin Leisure-Time Exercise Questionnaire was the most used instrument (Blanchard et al., 2007; Cardinal, Tuominen, & Rintala, 2004; Holtz, Kokotilo, Fitzgerald, & Frank, 2013; Keating et al., 2009; Yan, Cardinal, & Acock, 2015). At the level of the attitudes towards the practice of physical exercise, categories were created according to the dimensions of analysis presented, highlighting those that present with more frequency: social and/or familiar support (Blanchard et al., 2007; King, Vidourek, English, & Merianos, 2014; Nahar et al., 2016; Wallace et al., 2000; Yan et al., 2015); lack of time (Blanchard et al., 2007; King et al., 2014; Nahar et al., 2016; Wallace & Buckworth, 2001) self-efficacy (Cardinal et al., 2004; Wallace et al., 2000; Yan et al., 2015); accessibility/resources (Nahar et al., 2016; Yan et al., 2015). In order to study the level of knowledge about physical exercise, we should mainly consider: the concept and components of physical exercise, the relation of physical exercise and diseases and health benefits (Haase et al., 2004; Keating et al., 2009).

DISCUSSION

In order to measure physical exercise practice, students should be, essentially asked about the frequency (in number of days per week) of moderate, vigorous and moderate exercise; and about the number of hours per day spent sitting. The scales of attitudes presented in the different instruments analysed are more comprehensive, so it is proposed to construct a scale that includes the following dimensions: lack of energy; lack of motivation; lack of resources; lack of support and lack of time. For the scale of knowledge about physical exercise, the following dimensions are proposed: recommendations about the practice of physical exercise and the relation between physical exercise and diseases.

CONCLUSIONS

The current review provides guidelines for the construction of standardized and comparable measurement scales. Concomitantly, the verified low level of knowledge and the barriers to physical exercise reinforce the idea of the need to develop intervention programs in the promotion of physical exercise in Higher Education.

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